

Habitat: *New South Wales*: Mt. Kosciusko, 5,000 ft., 18. i. 54; 4 males and 3 females collected by Mr. Roderick Dobson. The general appearance of this new species resembles *Argiolestes griseus* Selys, and it is possible that it has actually been mistaken for this species, which, however, has no ventral spur near the apical end of the superior anal appendages. It differs from *A. icteromelas* Selys by its much smaller size (Abd. 27 mm. compared with 34-38 mm. in *icteromelas*), by the lower nodal index (13-15 compared with 18-20 in the males and 16-17 compared with 20-22 in the females), by the greater extent of the black markings on sides of thorax, by superior anal appendages relatively longer and less curved, by the marked pruinosity of the dorsum of thorax (quite absent or limited to the humeral stripes in *icteromelas*), and lastly by the great robustness of the female abdomen. The pterostigma of the female appears to retain its pale yellow colouring even in the adult stage, but this is lost in the female of *icteromelas*.

---

## *Antipodogomphus neophytus*, a New Species of Dragonfly from Northwestern Australia

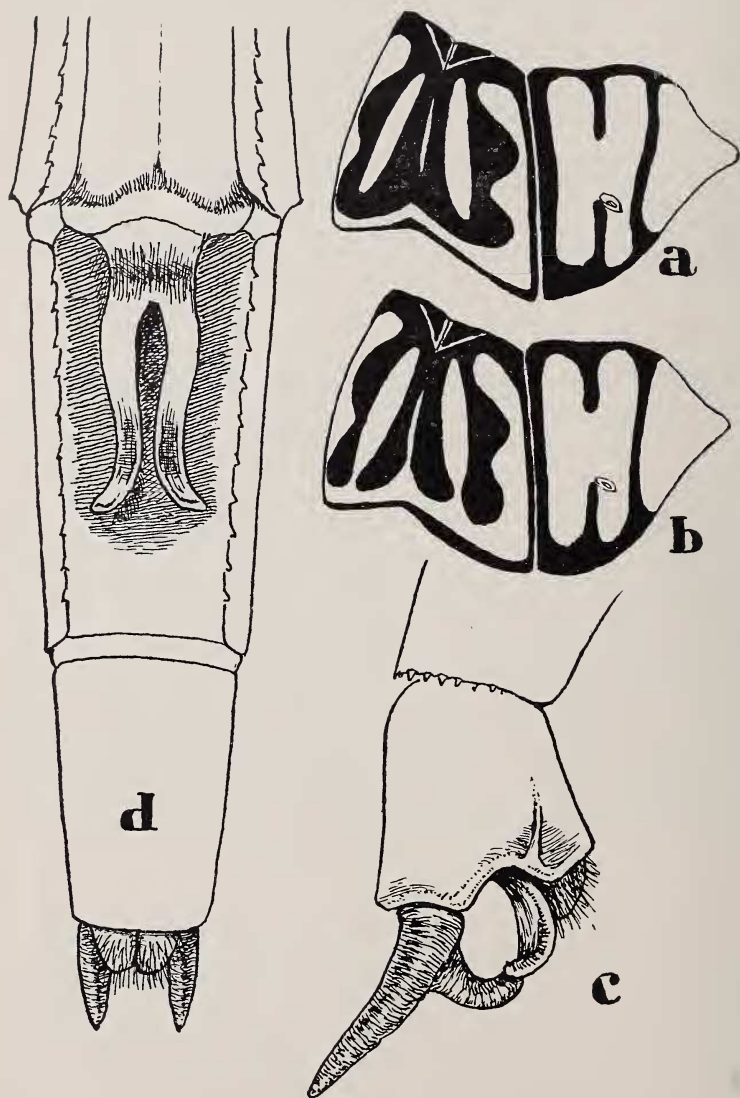
By LT.-COL. F. C. FRASER, I.M.S., Retd.

In a small collection of Odonata made by Dr. E. P. Hodgkin, of the University of Western Australia, I have found a new Gomphus belonging to the genus *Antipodogomphus* Fraser, bringing the number of species of the genus to three. In addition to this was a single female of *Orthetrum pruinosum migratum* Lieftinck, a rare species of which this sex was hitherto unknown. This species was first discovered by Dr. R. J. Tillyard, who sent a single male to Dr. F. Ris for his opinion; Dr. Ris remarked on its peculiarity as compared with *O. pruinosum pruinosum* (Burmeister), but said that he dared not name it in view of there being only a single example. Some forty years later M. A. Lieftinck redescribed the male and named it as a new subspecies from two males from North Australia. He pointed out quite a number of characters in which *migratum* differed from *pruinosum*, and these are so manifest that I personally would not confuse the two; therefore I prefer to regard it as a full species belonging to the group *pruinosum*. The description of the two insects follows:—

### ANTIPODOGOMPHUS NEOPHYTUS, n.sp.

Male. Abdomen 40 mm. Hindwing 30 mm. Pterostigma 3.5 mm.

Head: whole of lips, face, frons, and occiput pale yellow; vertex black but centred with yellow. Prothorax yellow with the dorsum of middle lobe and a spot on each side black. Synthorax black on dorsum marked with citron yellow, yellow on sides with sparse black markings as follows—middorsal carina finely yellow, antehumeral stripes elongated fusiform in shape which do not extend quite to the slightly interrupted mesothoracic collar, humeral stripes complete, markedly expanded at the upper, middle, and lower parts and obviously made up by the confluence of the three spots found in the related species *acolytus* and *proselytus*; laterally a very narrow widely interrupted black stripe on the first lateral suture, broken at level of spiracle, and a similar linear stripe on the whole of the second lateral suture. Legs sandy yellow, the femora striped in their length with black, the hind with a stripe on the extensor surface and one on each side, the other two pairs with a short linear black spot on the outer side



*a*, Thoracic markings of *Antipodogomphus neophytus* n. sp., male. *b*, The same of the female. *c*, Anal appendages of the same species viewed from the right side. *d*, End segments of female of *A. neophytus* to show genitalia.

of the distal ends; tibiae and tarsi black. Wings: costa bright yellow throughout its length and strongly contrasted against the black pterostigma; many other veins also yellow but the Radius conspicuously black; the whole wing tinted with yellow. Venational details: 14 to 15 antenodals and 10 postnodals in forewings; 10 antenodals and 8 to 9 postnodals in the hindwing; anal field of forewing one cell deep, that of hindwing 4 cells deep; an incomplete basal antenodal in all wings. Abdomen black with yellow markings—segment I with base narrowly black; 2 with a middorsal trilobate yellow stripe enclosed on each side by a broad black one, below which the oreillets and rest of sides are yellow, segments 3 to 6 with prejugal and apical black rings, the jugal one becoming progressively narrower from segment 3 to 6 and finely linear on 6; the apical rings, on the contrary, becoming progressively broader; segment 7 with its basal two-thirds yellow, 8 entirely yellow save for a small preapical dorsal black spot; segments 9 and 10 ferruginous. Anal appendages; superiors yellow, the ventral curved hooks dark ferruginous, as also is the inferior appendage; the superiors shaped almost exactly the same as in *proselytus*, the inferiors deeply forked. Genitalia: lamina ferruginous; posterior hamules very elongated and narrow, bright yellow with black apices; lobe of penis black.

Female. Abdomen 42 mm. Hindwing 32 mm. Pterostigma 4.0 mm.

Resembles the male closely in colour and markings, but the yellow ground-colour more extensive. The black of vertex encroaching on base of frons; the antehumeral stripes confluent with the mesothoracic collar and the latter extending outwards to become confluent with the humeral stripes; the black rings on segments 3 to 6 extend laterally to become confluent and enclose long oval yellow dorsal spots; on segments 5 and 6 the middorsal carina is finely black, thus dividing the dorsal spots into two; segment 7 has small apicolateral yellow spots in the apical black annule; segment 8 is largely black on dorsum, this extending nearly to base. Segments 8 to 10 greatly lengthened as in the two other species. Anal appendages about half as long as segment 10, conical, yellow.

Habitat: N.W. AUSTRALIA, Wyndham, Kimberley Research Station, a single pair taken in February, 1954.

This new species is distinguished from *acolytus* (Selys) by the antehumeral stripes not confluent with the mesothoracic collar, at least in the male; by the complete yellow humeral stripe (an upper triangular spot and a short linear one in *acolytus*); by the greatly reduced black on the sides (confluent in *acolytus* to enclose two or three yellow spots); no black line traversing the lower part of frons anteriorly; segments 8 to 10 ferruginous; hamules tipped with black. The ovipositor is very similar to that of *acolytus* but the base is more constricted and the two lobes into which it is cleft are narrower, closer together, and with the apices divaricate. The occiput is again somewhat similar to that of the female of *acolytus*, but the two spines are very minute and set even further apart. From *proselytus* (Selys) the armature of the female occiput and the shape of the ovipositor are entirely different; the thoracic markings differ (in *proselytus* the humeral yellow stripe is broken up into three or four spots and the black on the sides is very much more extensive, enclosing spots or a broken yellow stripe).

ORTHETRUM MIGRATUM Lieftinck.

*Orthetrum pruinsum migratum* Lieftinck.

Female. Abdomen 25 mm. Hindwing 32 mm.

The specimen is not quite fully adult and is of an olivaceous yellow with the abdomen inclining to ferruginous and all its sutures mapped out finely in black. The face is paler but slightly darkened on the frons; thorax without markings; legs sandy yellow. Wings hyaline with the extreme base of forewing and a large triangular area at base of hindwing rich amber in colour, extending in the hindwing to the first antenodal, just invading the base of the anal-loop and overlapping the *Cu*<sub>1</sub> and base of membrane, which latter is cinereous or pale brown. The venational details are closely similar to those of the male, but the three specimens (two males accompanying the female) show slight variations—13 to 15 antenodals in forewing and 10 to 11 in the hind; 8 to 9 postnodals in all wings; the pterostigma is paler yellow (dark ochreous between black veins in the males), 3 mm. in length. Segment 8 has but slight lateral dilatations. Ovipositor very small, inconspicuous.

Habitat: N.W. AUSTRALIA, Millstream, one pair, vi. 54, one male, Wittenden, 2.iii.54.

The types of the new *Antipodogomphus neophytus* and the allo-type female of *O. migratum* have been returned to Dr. Hodgkin, and are presumably lodged in the University of W. Australia Museum.

REFERENCES

- Fraser, F. C., 1953, *Cat. Coll. Selys*, Gomphidae, 21: 31-34, fig. 2, A. D; fig. 6, A. B. E. F. and G.; fig. 10, B. E. and F.
- Lieftinck, M. A., 1951, *Amer. Mus. Novit.* 1488: 35.
- Martin, E., 1901, *Mem. Soc. Zool. France*, 19: 233.
- Ris, F., 1910, *Cat. Coll. Selys*, Libellulinen 10: 242.
- Selys, E. de, Mss. names on labels attached to types of *acolytus* and *proselytus*, Brussels Museum.
- Tillyard, R. J., 1905, *Proc. Linn. Soc. N.S.W.* 4: 547, 549.  
*Id.* 1908, *ibid.* 33: 641.  
*Id.* 1909, *ibid.* 34: 253.